IN THE CLAIMS:

1. (Currently amended) A leak point wetness ~~sensor~~ detector for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a receptacle in said instrument body so arranged and disposed as to receive liquid which leaks from the urethra past the inserted catheter;

a temperature sensitive detector sensor mounted to said instrument body where it will be contacted by said leaked liquid, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature;

a ~~circuit adapted~~signal generator to generate and provide a reference output signal simulative of a selected temperature, where the selected temperature is below that of an anticipated temperature of said leaked liquid, and~~said circuit generating said reference output independent of ambient temperature~~ where the output signal of the selected temperature remains constant and is independent of ambient temperature; and

a comparator responsive to the difference between said outputs to detect and inform when the signal output sufficiently exceeds said reference output.

2. (Previously Presented) The sensor according to claim 1 in which drainage channels extend from said receptacle to the outside of said body to drain liquid from the receptacle.

3. (Previously Presented) The sensor according to claim 1 in which recorder means records related data when wetness is detected.

4. (Currently amended) A leak point wetness ~~sensor~~ detector for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a receptacle in said instrument body so arranged and disposed as to receive liquid which leaks from the urethra past the inserted catheter;

a single temperature sensitive detector sensor mounted to said instrument body where it will be contacted by said leaked liquid, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature;

a rate of change detector ~~circuit adapted~~ to detect a rate of change in the signal output from said single temperature sensitive detector sensor, said detected rate of change corresponding to a rate of change in temperature at said detector sensor.

5. (Previously Presented) The sensor according to claim 1, wherein said comparator outputs a signal indicating that liquid has leaked from said urethra.

6. (Currently Amended) The sensor according to claim 4, wherein said rate of change detector~~circuit~~ generates a signal indicating that liquid has leaked from said urethra.

7. (Currently Amended) The sensor according to claim 4, wherein said rate of change detector ~~circuit~~ differentiates said signal output from said temperature sensitive detector sensor.

8. (Currently Amended) A leak point wetness device for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a temperature sensitive detector sensor mounted to said instrument body where it will be contacted by liquid which leaks from the urethra past the inserted catheter, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature;

a ~~circuit adapted~~signal generator to generate and provide a reference output simulative of a selected temperature below that of an anticipated temperature of said leaked liquid, said ~~circuit~~ signal generator generating said reference output independent of ambient temperature; and

a comparator responsive to the difference between said outputs to detect and inform when the signal output from said detector sensor sufficiently changes relative to said reference output.

9. (Currently Amended) A leak point wetness device for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a single temperature sensitive detector sensor mounted to said instrument body where it will be contacted by liquid which leaks from the urethra past the inserted catheter, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature; and

a comparator to detect~~means for detecting~~ when the signal output from said single detector sensor sufficiently changes relative to a reference signal that is independent of ambient temperature and simulative of a selected temperature below that of an anticipated temperature of said leaked liquid.

10. (Previously Presented) The device according to claim 9, further comprising:

means for signaling the event of a leakage when the signal output from said detector sensor sufficiently changes relative to said reference signal.

11. (Currently Amended) The device according to claim 9, further comprising:

a signal generator ~~means for~~ generating said reference signal that is independent of ambient temperature and simulative of a selected temperature below that of an anticipated temperature of said leaked liquid.

12. (Currently Amended) A leak point wetness device for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a single temperature sensitive detector sensor mounted to said instrument body where it will be contacted by liquid which leaks from the urethra past the inserted catheter, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature; and

a rate of change detector~~circuit adapted~~ to detect a rate of change in the signal output from said single temperature sensitive detector sensor, said detected rate of change corresponding to a rate of change in temperature at said single detector sensor.

Please add new claims 13 *et al.*

13. (New) The detector according to claim 4, further comprising a recorder that records a signal when the rate of change detector detects the single temperature sensor is greater then a preset threshold.

14. (New) The detector according to claim 4, further comprising a signal when the rate of change detector detects the single temperature sensor is greater then a preset threshold.

15. (New) A leak point wetness device for urological investigations comprising:

an instrument body having a passage therethrough to pass a catheter, which catheter is intended for insertion into the bladder through the urethra;

a single temperature sensitive detector sensor mounted to said instrument body where it will be contacted by liquid which leaks from the urethra past the inserted catheter, said detector sensor being responsive to the temperature of said liquid and adapted to provide a signal output respective to said temperature;

a signal generator to generate and provide a reference output simulative of a selected temperature below that of an anticipated temperature of said leaked liquid; and

a comparator responsive to the difference between said output from signal generator and said output from the single temperature sensitive detector sensor, where the comparator detects and informs when the signal output from said single detector sensor sufficiently changes relative to said reference output.

16. (New) The device according to claim 15, further comprising:

a recorder that stores when the comparator detects when the signal output from said single detector sensor sufficiently changes relative to said reference output.

17. (New) The device according to claim 15, wherein said reference output independent of ambient temperature.

18. (New) The device according to claim 15, wherein said reference output independent of environmental conditions.